

# Maintaining agricultural production systems that are highly competitive in the global economy

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## V(A). Planned Program (Summary)

### 1. Name of the Planned Program

Maintaining agricultural production systems that are highly competitive in the global economy

## V(B). Program Knowledge Area(s)

### 1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
125	Agroforestry	4%	4%	4%	4%
202	Plant Genetic Resources	15%	15%	15%	15%
205	Plant Management Systems	19%	19%	19%	19%
216	Integrated Pest Management Systems	20%	20%	20%	20%
302	Nutrient Utilization in Animals	20%	20%	20%	20%
311	Animal Diseases	10%	10%	10%	10%
402	Engineering Systems and Equipment	4%	4%	4%	4%
502	New and Improved Food Products	3%	3%	3%	3%
601	Economics of Agricultural Production and Farm Management	5%	5%	5%	5%
<b>Total</b>		<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

## V(C). Planned Program (Inputs)

### 1. Actual amount of professional FTE/SYs expended this Program

Year: 2008	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	2.0	0.5	51.1	20.6
<b>Actual</b>	2.0	0.5	53.0	21.5

### 2. Institution Name: Alabama A&M University

Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
<b>Smith-Lever 3b &amp; 3c</b>	<b>1890 Extension</b>	<b>Hatch</b>	<b>Evans-Allen</b>
0	0	0	1019017
<b>1862 Matching</b>	<b>1890 Matching</b>	<b>1862 Matching</b>	<b>1890 Matching</b>
0	0	0	1019017
<b>1862 All Other</b>	<b>1890 All Other</b>	<b>1862 All Other</b>	<b>1890 All Other</b>
0	0	0	0

### 2. Institution Name: Auburn University

**Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
<b>Smith-Lever 3b &amp; 3c</b>	<b>1890 Extension</b>	<b>Hatch</b>	<b>Evans-Allen</b>
0	0	3524226	0
<b>1862 Matching</b>	<b>1890 Matching</b>	<b>1862 Matching</b>	<b>1890 Matching</b>
0	0	3524226	0
<b>1862 All Other</b>	<b>1890 All Other</b>	<b>1862 All Other</b>	<b>1890 All Other</b>
0	0	0	0

**2. Institution Name: Tuskegee University**

**Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
<b>Smith-Lever 3b &amp; 3c</b>	<b>1890 Extension</b>	<b>Hatch</b>	<b>Evans-Allen</b>
0	0	0	792607
<b>1862 Matching</b>	<b>1890 Matching</b>	<b>1862 Matching</b>	<b>1890 Matching</b>
0	0	0	792607
<b>1862 All Other</b>	<b>1890 All Other</b>	<b>1862 All Other</b>	<b>1890 All Other</b>
0	0	0	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Investigations were conducted for the development of new varieties, improved production methods such as new pesticides and cultivars in plant production systems, nutritional strategies in animal production systems, and means to generate energy. Research results were shared with extension personnel for further dissemination, particularly to county agents and producers. Additional dissemination of results were through direct grower contact (such as at field days and demonstrations, and commodity meetings), through publications (experiment station bulletins, on-line reports, press releases, as well as scientific journal articles), and non-traditional efforts such as working through community and faith-based groups.

**2. Brief description of the target audience**

Extension specialists, county agents, producers (particularly those that are innovative), all producers in the state, students (both K-12 and at our institutions), all state citizens. 48,000 people are said to be directly involved in farming; while Alabama's agribusiness industries account for 476,000 jobs.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	2000	12000	2000	8000
2008	3000	15000	4000	10000

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## 2. Number of Patent Applications Submitted (Standard Research Output)

### Patent Applications Submitted

Year	Target
Plan:	0
2008:	19

### Patents listed

1. Safening of Carotenoid-inhibiting Herbicides and Mixtures of Carotenoid-inhibiting and photosynthesis-inhibiting Herbicides with Flucarbazone on Turfgrass
2. Safening of Carotenoid-inhibiting Herbicides and Mixtures of Carotenoid-inhibiting and photosynthesis-inhibiting Herbicides with Flucarbazone on Turfgrass
3. Safening of Carotenoid Biosynthesis-inhibiting Herbicides on Cool-season Turfgrass Species with Triazolopyrimidine Herbicides
4. Chestnut Plant Named 'AU Buck I'
5. Chestnut Plant Named 'AU Gobbler I'
6. Chestnut Plant Named 'AU Gobbler II'
7. Chestnut Plant Named 'AU Buck IV'
8. Chestnut Plant Named 'AU Buck II'
9. Chestnut Plant Named 'AU Premier'
10. Chesnut Plant Named 'AU Buck III'
11. Safening of Carotenoid-inhibiting Herbicides and Mixtures on Turfgrass Species and Grass Crops
12. Kiwi Plant Named 'AU Fitzgerald'
13. Kiwi Plant Named 'AU Authur'
14. Nematicidal Properties of Sodium Azide in Combination with Propionic Acid
15. Azide and Pesticide Mixture for Controlling a Population of a Deleterious Soil Organism
16. 2-Propenal and Related Enal Compounds for Controlling Plant Pests and Weeds in Soil
17. Methods and Formulations of Sodium Azide
18. Combinations of Herbicides and Safeners
19. Compositions and Methods of Controlling Weeds and Nematodes Using EPTC and Related Compounds

## 3. Publications (Standard General Output Measure)

### Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	80	80

## V(F). State Defined Outputs

### Output Target

#### Output #1

### Output Measure

Publications

Year	Target	Actual
2008	80	80

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**V(G). State Defined Outcomes**

O No.	Outcome Name
1	Market value of agricultural products (\$ billion) (2002 = \$3.26 bil). Program success will be indicated if market value of AL ag products stay level or increase. (Medium term outcome)
2	Number of producers (ALFA cites 48,000, Apr. 2006). Program success will be reflected by little or no change in size of the population of producers. (Long-term)
3	Average producer age (2002 = 56.6). Program success will be indicated by declining or no change in the average producer age. (Long-term)

**Outcome #1**

**1. Outcome Measures**

*Not reporting on this Outcome for this Annual Report*

**2. Associated Institution Types**

**3a. Outcome Type:**

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
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**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
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**V(H). Planned Program (External Factors)**

**External factors which affected outcomes**

Natural Disasters (drought,weather extremes,etc.)  
Economy  
Appropriations changes  
Public Policy changes  
Government Regulations  
Competing Programmatic Challenges  
Populations changes (immigration,new cultural groupings,etc.)

**Brief Explanation**

2008 was another extremely dry year following the previous drought years of 2006 and 2007 in the southereastern US.Such historical drought certainly contributed to lower agricultural production.The change in the energy sector of the economy has had a large impact on agriculture. While crop based agriculture was affected by drought, crop growers were largely ahead as the prices of grains and other crops increased drastically in the last year.However, the increase in prices of corn, soybean, and other crops led to major increases in the cost of animal feed, which adversely affected the poultry, beef, dairy, egg, and aquaculture industries. On the other hand, the historically high fuel and energy cost in the last year has led to increases in prices of fertilizers and production costs, which add much stress to agriculture as a whole.

**V(I). Planned Program (Evaluation Studies and Data Collection)**

**1. Evaluation Studies Planned**

Retrospective (post program)  
During (during program)

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### **Evaluation Results**

Specific projects that comprise the Planned Program were evaluated by departmental leaders. Overview of programs was evaluated by institution leaders. For the most part, excellent results were achieved. For exceptionally few projects, further funding was terminated if the results were found not satisfactory.

### **Key Items of Evaluation**